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| BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051 | | | EXAMINER LI, GUANG W | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/512,018 | Applicant(s) COPPOLA ET AL. | |
| | Examiner GUANG LI | Art Unit 2446 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/19/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/23/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment date 02/23/2009
2. Claims 20-38 are presented for examination.

Response to Arguments

3. Applicant's arguments with respect to claims 20-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 23-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A system comprising a set of internetworked Content delivery network..." that comprises interface modules is implemented in the software module. Software modules which direct to the **software per se**. In the originally-filed at page 4 lines 24- page 5 lines 15 discloses the Content internetworking Gateways (CIG) are comprising 4 interface modules and a central module. It's the clearly the structures of a CIG are software module instead of physically hardware. Since the software module does not meet one of four statutory categories, therefore, it's non-statutory under 35 USC 101.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 20-21, 23-24, 26-28, 32-35, 37-38 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Swildens et al. (US 2002/0052942 A1) in view of Mead et al. (US 2003/0067912).

8. Regarding claim 20, Swildens teaches a method for implementing internetworking of a set of Content Delivery Networks (CDNs) provided with

respective caches,

respective Directory Name Service or Domain Name Servers,

respective content distribution systems communicatively coupled to respective clients,

and

interface components each susceptible of being associated with a respective CDN in the set of CDNs and co-operating with at least one similar interface component associated with another CDN in the set of CDN, the method comprising the steps of:

collecting in the interface components content-related data related to the association of the contents and the caches that contain the content (collecting delivery nodes information by point of presence server for Universal delivery network “Customer.speedera.net is mapped to a collection of delivery nodes represented by point of presence servers, i.e., POPs 103, 104. As merely an example, a method for using such a UDN is provided below” see Swildens:

¶[0038];¶[0056]);

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processing the content-related data to obtain routing data (exchanging service metric information for the servers in the universal delivery network to make its routing path “A ServiceProbe determines service metric information for servers in the UDN and reports them to the DNS server. Service metrics are one of the decision criteria used by the DNS to make its routing determinations” see Swildens: ¶[0052]) and

transferring the routing data to the Directory Name Service or Domain Name Server of the respective CDN (exchanging service metric information for the servers in the universal delivery network to make its routing path “A ServiceProbe determines service metric information for servers in the UDN and reports them to the DNS server. Service metrics are one of the decision criteria used by the DNS to make its routing determinations” see Swildens: ¶[0052]) so as to update at least one table of the Directory Name Service or Domain Name Server (periodic checking the caches to see whether a piece of content is update if it the update the caches in the network and update the DNS “The periodic checking is a common feature of caches but if a piece of content is updated, the old content may be invalidated and the new content published to all the caches in the network. The present CDN service makes this purging possible with a cache control utility that allows you to invalidate a single object, a content directory, or an entire site contained in the caches” see Swildens: [0091]) with the routing data provide access to the clients of the respective CDN to contents associated with the another CDN (Speedera DNS server is the component that able to collecting and processing the requests and direct them to the closest cache which are different from the DNS translation and update the DNS servers “The Speedera DNS server (SPD) is the core component of the Speedera GTM solution and provides load balancing across the servers distributed all over the Internet. The SPD

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acts as the traffic cop for the entire network. It handles the DNS requests from the clients, resolving hostnames to IP addresses” and “At various intervals, the ServiceProbe sends an update to all DnsServers in the Speedera Network using the Speedera SERVVP protocol and writes the update to a log file” see Swildens: ¶[0214]; ¶[0449]).

Swildens does not explicitly disclose the at least one table of the Directory Name service or Domain Name Server of the respective CDN.

However Mead teaches the at least one table of the Directory Name service or Domain Name Server of the respective CDN (router routing data stored in the database which are populated by peer router in the database at the server and updating the database in the domain server “The database is maintained on a server, where the database has entries for destination address, and an entry for a particular destination address gives the address of one or more peer routers capable of routing a packet to that particular destination address. The database is populated by peer routers updating the database with information concerning the destination address which the peer routers can reach” see Mead: ¶[0016]; ¶[0050]) in order to provide more efficient reachability in the content network see Mead: ¶[0014]). Mead further teaches transferring the routing data to the Directory Name Service or Domain Name Server of the respective CDN so as to update at least one table of the Directory Name Server or Domain Name Server with the routing data provide access to the clients of the respective CDN to contents associated with the another CDN (routers processing routing path to each other in the content network and maintain the database on a server and share the database with the routers “The database is maintained on a server, where the database has entries for destination address, and an entry for a particular destination address gives the address of one or more peer routers capable of

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routing a packet to that particular destination address. The database is populated by peer routers updating the database with information concerning the destination address which the peer routers can reach. The database on the server is interrogated by the source router to learn the address of a destination peer router” see Mead: ¶[0016]).

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Swildens to include (or to use, etc.) the at least one table of the Directory Name service or Domain Name Server of the respective CDN as taught by Mead in order to provide more efficient reachability in the content network see Mead: ¶[0014]).

9. Regarding claim 21, Swildens together with Mead taught the method defined in claim 20 as described hereinabove. Swildens further teaches the following steps are performed by at least one of the interface components:

receiving data on the state of the caches of the contents of the respective CDN (current stats of each resource and availability “It contains a mapping of where resources (grouped by hostnames) have been allocated as well as the current state of each resource and their availability to each client. It receives the static information (the mappings) from the configuration file and the dynamic information (resource availability) from the probes” see Swildens: ¶[0047]),

determining whether the contents require updating (periodic checking the caches to see whether there is new content “The periodic checking is a common feature of caches but if a piece of content is updated, the old content may be invalidated and the new content published to all the caches in the network. The present CDN service makes this purging possible with a cache control utility that allows you to invalidate a single object, a content directory, or an entire site contained in the caches” see Swildens: [0091]), and

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managing the updating by performing at least one step in the following group comprising:

editing a respective database,

editing a respective Directory Name Service tables (synchronize with a group of DNS server “This proxy ability combined with algorithms to divide client latency and persistence information across a group of DNS servers greatly reduces the problems associated with WAN replication and synchronization” see Swildens: ¶[0048]),

editing a respective log file archive, and

forwarding an update request message to a similar component associated with the another CDN.

10. Regarding claim 23, Swildens teaches a system comprising a set of internetworked Content Delivery Networks (CDNs) provided with

respective caches (caches “The caching servers host customer content that can be cached and stored, e.g., images, video, text, and/or software” see Swildens: ¶[0010]),

respective Directory Name Service or Domain Name Server (Speedera DNS server “Speedera DNS Server (SPD) load balances network requests among customer Web servers and directs client requests for hosted customer content to the appropriate caching server” see ¶[0011]),

respective content distribution systems to respective clients (Universal Delivery network that delivery content respective to clients “As shown, the system 100 includes a variety of features to defined the Universal Delivery Network (UDN). The UDN has a combined content

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delivery network 103 and 104 and a global traffic management network 105, which are coupled to each other” see Swildens: ¶[0035]), and

Content internetworking gateways (CIGs) susceptible of each being associated with a respective CDN in the set of CDNs and co-operating with at least one similar CIG associated with another CDN in the set of CDNs (Speedera traffic manager servers, exchanging service metric information for the DNS servers in the universal delivery network “A ServiceProbe determines service metric information for servers in the UDN and reports them to the DNS server. Service metrics are one of the decision criteria used by the DNS to make its routing determinations” see Swildens: ¶[0052]), the CIGs being configured to collect content-related data related to the association of contents and the caches that contain the contents (collecting delivery nodes information by point of presence server for Universal delivery network “Customer.speedera.net is mapped to a collection of delivery nodes represented by point of presence servers, i.e., POPs 103, 104. As merely an example, a method for using such a UDN is provided below” see Swildens: ¶[0038];¶[0056]), the CIGs being configured to process the content-related data to obtain routing data, the CIGs being configured to transfer the routing data to the Directory Name Service or Domain Name Server associated with each respective CDN so as to update at least one tables of the Directory Name Service or Domain Name Server (periodic checking the caches to see whether a piece of content is update if it the update the caches in the network and update the DNS “The periodic checking is a common feature of caches but if a piece of content is updated, the old content may be invalidated and the new content published to all the caches in the network. The present CDN service makes this purging possible with a cache control utility that allows you to invalidate a single object, a content directory, or an entire site

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contained in the caches” see Swildens: [0091]) with routing data to provided access to the clients of the respective CDN to contents associated with the another CDN (Speedera DNS server is the component that able to collecting and processing the requests and direct them to the closest cache which are different from the DNS translation and update the DNS servers “The Speedera DNS server (SPD) is the core component of the Speedera GTM solution and provides load balancing across the servers distributed all over the Internet. The SPD acts as the traffic cop for the entire network. It handles the DNS requests from the clients, resolving hostnames to IP addresses” and “At various intervals, the ServiceProbe sends an update to all DnsServers in the Speedera Network using the Speedera SERVP protocol and writes the update to a log file” see Swildens: ¶[0214]; ¶[0449]).

Swildens does not explicitly disclose the at least one table of the Directory Name Service or Domain Name Server of the network of the respective CDN.

However Mead teaches the at least one table of the Directory Name Service or Domain Name Server of the network of the respective CDN (router routing data stored in the database which are populated by peer router in the database at the server and updating the database in the domain server “The database is maintained on a server, where the database has entries for destination address, and an entry for a particular destination address gives the address of one or more peer routers capable of routing a packet to that particular destination address. The database is populated by peer routers updating the database with information concerning the destination address which the peer routers can reach” see Mead: ¶[0016]; ¶[0050]) in order to provide more efficient reachability in the content network see Mead: ¶[0014]). Mead further teaches transferring the routing data to the Directory Name Service or Domain Name Server of the

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respective CDN so as to update at least one table of the Directory Name Server or Domain Name Server with the routing data provide access to the clients of the respective CDN to contents associated with the another CDN (routers processing routing path to each other in the content network and maintain the database on a server and share the database with the routers “The database is maintained on a server, where the database has entries for destination address, and an entry for a particular destination address gives the address of one or more peer routers capable of routing a packet to that particular destination address. The database is populated by peer routers updating the database with information concerning the destination address which the peer routers can reach. The database on the server is interrogated by the source router to learn the address of a destination peer router”).

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Swildens to include (or to use, etc.) the at least one table of the Directory Name Service or Domain Name Server of the network of the respective CDN as taught by Mead in order to provide more efficient reachability in the content network see Mead: ¶[0014]).

11. Regarding claim 24, claim 24 is rejected for the same reason as claim 21 as described hereinabove.

12. Regarding claim 26, claim 26 is rejected for the same reason as claim 21 as described hereinabove.. Regarding claim 21, Swildens together with Mead taught the claimed method, therefore together, they teach the claimed content internetworking gateway.

13. Regarding claim 27, Swildens together with Mead taught the interface component defined in claim 26 as described hereinabove. Swildens further teaches where in the instructions, when executed by the processor, further perform:

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for retrieving data on the availability of contents from a content distribution system on associated with the respective CDN, (content availability “It contains a mapping of where resources (grouped by hostnames) have been allocated as well as the current state of each resource and their availability to each client” see Swildens: ¶[0047]), and

interacting with a monitoring system configured to control the CIG (log the request and operational data “The DNS server logs both request and operational data to the database for subsequent viewing. Both real-time and historical views are available. The request data allows the administrator and customer to see to the number of requests directed to each POP on a per hostname basis” see Swildens: ¶[0049]).

14. Regarding claim 28, claim 28 is rejected for the same reason as claim 21 as described hereinabove.

15. Regarding claim 32, Swildens together with Mead taught CIG defined in claim 26 as described hereinabove. Swildens further teaches the CIG is configured to exchange information with the at least one similar CIG via an IP transportation protocol (using TCP protocol for exchange information communication “The traffic generally travels through the world wide network of computers using a packetized communication protocol, such as TCP/IP” see Swildens: ¶[0006]).

16. Regarding claim 33, Swildens together with Mead taught CIG defined in claim 26 as described hereinabove. Swildens further teaches the CIG is configured to exchange signals indicating quantities selected from the following group:

a URL identifying the content to which the message refers, an IP address of the cache that distributes the content, an ID of the CDN to which the cache belongs, a cache state, a

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content state in the cache, and a life time of the routing data (URL identified the homepage of the client request whether user changing URL or not, server will redirect the requests “In a specific embodiment, the site can be modified for redirecting a user requests by changing the URL in the HTML. The following example, a request for a picture, shows the original html and the revised html” see Swildens: ¶[0103]).

17. Regarding claim 34, Swildens together with Mead taught CIG defined in claim 27 as described hereinabove. Swildens further teaches the CIG is configured to transfer signals indicating quantities from the following group comprising:

an IP address of the cache to which the message refers (IP address for the cache in the closet DNS “For persistent hostnames, SPD returns the same IP addresses, for a given client” see Swildens: ¶[0012]),

a percentage of CPU used by the cache,

a percentage of RAM used by the cache,

a percentage of disc used by the cache, and

a percentage of users connected in relation to the maximum capacity of the involved cache service (measuring CPU load and memory usage “LOADP provides direct measurement of many system parameters including CPU load, memory usage, swap and disk status, and is used in load balancing decisions” see Swildens: ¶[0053]).

18. Regarding claim 35, Swildens together with Mead taught CIG defined in claim 27 as described hereinabove. Swildens further teaches the CIG is configured to send to the core signals indicating quantities from the following group comprising:

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a URL identifying the content to which the message refers (IP address for the cache in the closet DNS “For persistent hostnames, SPD returns the same IP addresses, for a given client” see Swildens: ¶[0012]),,

a list of IP addresses of the caches of the content (list of IP address for a given host in the SPD server “The SPD server maintains a table containing the IP address given out for a given hostname to a client. This table is created dynamically in response to incoming requests and is synchronized across all the SPD servers responsible for a given zone” see Swildens: ¶[0012]),

a level of confidence of the content,

a level of availability of the content, cache state (content availability and current state “It contains a mapping of where resources (grouped by hostnames) have been allocated as well as the current state of each resource and their availability to each client” see Swildens: ¶[0047]),

a life time of routing data (real time statistic and historical data of routing data per user “Both real-time and historical views are available. The request data allows the administrator and customer to see to the number of requests directed to each POP on a per hostname basis” see Swildens: ¶[0049]).

19. Regarding claim 37, Swildens together with Mead taught CIG defined in claim 26 as described hereinabove. Swildens further teaches the CIG is configured to communicate with the Directory Name Server to update at least one respective table on the basis of signals indicating quantities from the group comprising:

an ID of a operation to be conducted on the at least one respective table of the Directory Name Server, the ID identifying the operation to be one of an addition and a deletion, a type of register, a name of a domain to which the message content refers, a entire URL of the content to

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which the message content refers, an IP address of the best cache to serve the domain, and a life time of the register (the closest caching server serving the appropriated user request “A Speedera DNS Server (SPD) load balances network requests among customer Web servers and directs client requests for hosted customer content to the appropriate caching server. The appropriate caching server is selected by choosing the caching server that is closest to the user, is available, and is the least loaded” see Swildens: ¶[0012]; ¶[0087]).

20. Regarding claim 38, Swildens together with Mead taught CIG defined in claim 26 as described hereinabove. Swildens further teaches the memory is configured to host a data structure containing information on the state of the respective CDN and at least one other CDN included in the set of CDNs (caching system to the distribute content from a original site that is close to a user can be implementing in Universal Delivery Network which that contain more than one Content Delivery network "For standard Web content, we implemented a caching system to distribute Web content from an origin server to a cache server that is close to a user. This means an origin server needs to exist that contains a master copy of the content. If the user has an existing Web site, the existing Web site will be the origin site” and “The UDN can be implemented as a single outsourced solution or service to a customer. When deployed across the WAN, it creates a unified network that provides a universal solution for content routing and high availability delivery” see Swildens: ¶[0080]; Fig.1).

21. Regarding claim 40, Swildens together with Mead taught CIG defined in claim 32 as described hereinabove. Swildens further teaches wherein the IP transportation is the TCP protocol (using TCP protocol for exchange information communication “The traffic generally

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travels through the world wide network of computers using a packetized communication protocol, such as TCP/IP” see Swildens: ¶[0006]).

22. Claims 22, 25, 29-31, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swildens et al. (US 2002/0052942 A1) in view of Mead et al. (US 2003/0067912) further in view of M.Green (Content Internetworking Architectural Overview).

23. Regarding claim 22, Swildens together with Mead teach the method in claim 21 as described hereinabove. Swildens together with Mead fail interface components communicate via a CNAP protocol.

However, M.Green teaches a system for implement internetworking of a set of Content Delivery Networks, the networks in said set being provided with respective caches, respective to Directory Name Service. M.Green further teaches the interface components communicate via a CNAP protocol (A common protocol for the advertisement of content see Page 21 section 4.4.3 Advertising Requirements) in order provide more efficient delivery protocol for the content networks.

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of modified Swildens to include (or to use, etc.) interface components communicate via a CNAP protocol as taught by M.Green in order provide more efficient delivery protocol for the content networks.

24. Regarding claim 25, claim 25 is rejected for the same reason as claim 22 as described hereinabove.

25. Regarding claim 29, claim 29 is rejected for the same reason as claim 22 as described hereinabove.

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26. Regarding claim 30, Swildens through M.Green taught the CIG defined in claim 29 as described hereinabove. Swildens further teaches the CIG is configured to translate from the CNAP protocol to a format that can be understood by the at least one similar CIG (the LATNP protocol implementing message share the common header provided the same standard for other interface to able understand the message “The LATNP protocol implementation is supported using two messages. Both messages share a common header. The header is followed by a variable number of request elements for the Latency Request and by a variable number of latency metric elements for the Latency Metric Message” see Swildens: ¶[0505])

27. Regarding claim 31, Swildens through M.Green taught CIG defined in claim 30 as described hereinabove. Swildens further teaches CIG and the at least one similar CIG comprises the transmission of signals indicating quantities from the group comprising:

an ID of the CDN in which the CIG is associated, an IP address associated with the CIG, (list of IP address for a given host in the SPD server “The SPD server maintains a table containing the IP address given out for a given hostname to a client. This table is created dynamically in response to incoming requests and is synchronized across all the SPD servers responsible for a given zone” see Swildens: ¶[0012]),

ID of systems interconnected via the CIG and the at least one similar CIG, IP addresses of remote interface components associated with the internetworking CDNs,

a level of confidences of an internetworking network connection (different internetworking connection for each site whether is health site or not “The client location is coupled to a server, which is for a specific user. The user can be any Web site or the like that distributes content over the network. As merely an example, the user can be a portal such as

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Yahoo! Inc. Alternatively, the user can be an electronic commerce site such as Amazon.com and others. Further, the user can be a health site” see Swildens: ¶[0066]), and

at least one identification of a physical characteristic (load balancing will be in the same zone on the different SPD servers “When SPD has to forward the DNS request to servers in another zone, it selects the server with the best (lowest) latency value. This allows the SPD server to dynamically load balance between the SPD servers in the same zone and avoid servers that may be down or are having some other problems” see Swildens: ¶[0014]).

28. Claims 22, 25, 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swildens et al. (US 2002/0052942 A1) in view of Mead et al. (US 2003/0067912) and further in view of M.Green (Content Internetworking Architectural Overview).

29. Regarding claim 22, Swildens together with Mead teach the method in claim 21 as described hereinabove. Swildens together with Mead teach fail interface components communicate via a CNAP protocol.

However, M.Green teaches a system for implement internetworking of a set of Content Delivery Networks, the networks in said set being provided with respective caches, respective to Directory Name Service. M.Green further teaches the interface components communicate via a CNAP protocol (A common protocol for the advertisement of content see Page 21 section 4.4.3 Advertising Requirements) in order provide more efficient delivery protocol for the content networks.

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Modified Swildens to include (or to use, etc.) interface components

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communicate via a CNAP protocol as taught by M.Green in order provide more efficient delivery protocol for the content networks.

30. Regarding claim 25, claim 25 is rejected for the same reason as claim 22 as described hereinabove.

31. Regarding claim 29, claim 29 is rejected for the same reason as claim 22 as described hereinabove.

32. Regarding claim 30, Swildens through M.Green taught he interface component defined in claim 29 as described hereinabove. Swildens further teaches each first interface module is configured to translate from the CNAP protocol to a format that can be understood by a core of another interface component (the LATNP protocol implementing message share the common header provided the same standard for other interface to able understand the message “The LATNP protocol implementation is supported using two messages. Both messages share a common header. The header is followed by a variable number of request elements for the Latency Request and by a variable number of latency metric elements for the Latency Metric Message” see Swildens: ¶[0505])

33. Regarding claim 31, Swildens through M.Green taught he interface component defined in claim 30 as described hereinabove. Swildens further teaches the interface component defined in claim 30 wherein the communication between the first interface module and another first interface module of a similar interface component comprises the transmission of signals indicating quantities from the following group comprising:

ID of the network in which the interface component is associated, IP address of the computer hosting the local interface component (list of IP address for a given host in the SPD

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server “The SPD server maintains a table containing the IP address given out for a given hostname to a client. This table is created dynamically in response to incoming requests and is synchronized across all the SPD servers responsible for a given zone” see Swildens: ¶[0012]),

ID's of interconnected systems via the interface component and the similar interface component, IP addresses of the remote interface components of the internetworking systems,

level of confidences of the internetworking network connection (different internetworking connection for each site whether is health site or not “The client location is coupled to a server, which is for a specific user. The user can be any Web site or the like that distributes content over the network. As merely an example, the user can be a portal such as Yahoo! Inc. Alternatively, the user can be an electronic commerce site such as Amazon.com and others. Further, the user can be a health site” see Swildens: ¶[0066]), and

at least one identification of a physical characteristics (load balancing will be in the same zone on the different SPD servers “When SPD has to forward the DNS request to servers in another zone, it selects the server with the best (lowest) latency value. This allows the SPD server to dynamically load balance between the SPD servers in the same zone and avoid servers that may be down or are having some other problems” see Swildens: ¶[0014]).

34. Regarding claim 39, Swildens through M.Green taught CIG defined in claim 31 as described hereinabove. Swildens further teaches the at least one identification of a physical characteristic includes a geographical distance of the connection between the CIG and the at least one similar CIG (load balancing will be in the same zone on the different SPD servers “When SPD has to forward the DNS request to servers in another zone, it selects the server with the best (lowest) latency value. This allows the SPD server to dynamically load balance between the SPD

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servers in the same zone and avoid servers that may be down or are having some other problems” see Swildens: ¶[0014]).

35. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swildens et al. (US 2002/0052942 A1) in view of Mead et al. (US 2003/0067912) and further in view of Bowman-Amuah (US 6,289,382).

36. Regarding claim 36, Swildens together with Mead teach the interface component in claim 35 as described hereinabove. Swildens together with Mead fail to teach quantity identifying the level of confidence of the content is susceptible of assuming distinct levels corresponding to at least one first level of confidence in the group comprising: a first level of confidence indicating that the contents may be exchanged by all networks in the set of networks, and a second level of confidence indicating that the contents may be exchanged on by a selectively determined subset of networks in the set of networks.

However Bowman-Amuah teaches the quantity identifying the level of confidence of the content is susceptible of assuming distinct levels corresponding to at least one first level of confidence in the group comprising: a first level of confidence indicating that the contents may be exchanged by all networks in the set of networks, and a second level of confidence indicating that the contents may be exchanged on by a selectively determined subset of networks in the set of networks (Three different kind of level security toward security component: High level security is whether the user has fully access to run the application; next level check user has the access to the data; lowest is whether access to the widgets on a window see Bowman-Amuah: col.52 lines 38-45) in order to provide less complex, faster interaction because of the web's level of interaction between clients and servers (see Bowman-Amuah: col.2 lines 18-20).

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It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Modified Swildens to include (or to use, etc.) a first level of confidence indicating that the contents may be exchanged by all networks in the set of networks, and a second level of confidence indicating that the contents may be exchanged on by a selectively determined subset of networks in the set of networks as taught by Bowman-Amuah in order to provide less complex, faster interaction because of the web's level of interaction between clients and servers (see Bowman-Amuah: col.2 lines 18-20).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guang Li whose telephone number is (571) 270-1897. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM(EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 11, 2009

GL

Patent Examiner

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit

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